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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,601	08/29/2003	John Behan Martin	506646-5004	6885
9629	7590	02/24/2005	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			BUI, THACH H	
			ART UNIT	PAPER NUMBER
			3752	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,601

Applicant(s)

MARTIN ET AL. 

Examiner

Thach H Bui

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. Applicant's prior art citation filed March 21, 2002 has been received, considered and placed of record.

Claim Objections

2. Claims 9, 13 and 14 are objected to under 37 CFR 1.75(c) as being in improper form because multiple dependent claims. They depend on another multiple independent claims. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "a baffle adjacent the nozzle exits for disturbing the mixed flow of air and liquid from said nozzles". The Specification recites "a baffle, 106, which reduces the outlet cross-section abruptly at the beginning of the divergent exit passage, 98, to promote mixing". There is no clear recitation and/or teaching for: "a baffle adjacent the nozzle exits for disturbing the mixed flow of air and liquid from said nozzles".

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

The claims are replete with informalities too numerous to mention specifically. The following informalities are merely exemplary thereof. The claims should be revised.

Claim 1 is vague and indefinite because "vapour" renders the claim unclear. It should be "vapor".

Claim 2 is vague and indefinite because "a baffle ...and extends transversely over part of the cross-sectional extent of the nozzle or a continuation of the air flow path therefrom" renders the claim unclear.

Claim 3 is vague and indefinite because there is no clear or proper antecedent basis for "said baffle is formed by the liquid exit nozzle".

Claim 6 is vague and indefinite because "outlet nozzle" recited in line 7 appears to be a double-inclusion of "an outlet nozzle" recited in line 5. Is it "an air outlet nozzle"?

Claim 6 is vague and indefinite because "said outlet nozzle to overlie a part of an axial projection of said outlet nozzle air flow path, the remainder of the air flow path at

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the outlet from said nozzle being not substantially greater than the cross-section of the liquid flow path from the liquid exit nozzle" renders the claim unclear.

Claim 9 is vague and indefinite because "said which liquid nozzle blocking air flow over a part of said major dimension of said oblong cross-section" recited in lines 3-5, page 17, renders the claim unclear.

Claim 10 is vague and indefinite because "nozzles being provided by depressions in at least one of said faces" renders the claim unclear. It should be "said nozzle unit being provided by depressions in at least one of said faces".

Claim 11 is vague and indefinite because "depressions in at least one of said faces provide sockets for receiving air and liquid supply means" renders the claim unclear. It does not make sense.

Claim 15 is vague and indefinite because "a liquid conduit depends into a lower region of the vessel, the nozzle unit holding coacting nozzles for the carrier fluid and liquid from said conduit" renders the claim unclear.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-9, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Behan et al. (U.S. Patent No. 6,568,604).

Behan et al. teach a liquid dispensing device comprising an air pump (4), a vessel for the liquid to be dispensed (10), a conduit (20) extending from a lower region of the vessel to an exit nozzle (22), and a forced air outlet conduit (14) for an air flow from the pump leading to an outlet nozzle for directing the air flow past the liquid exit nozzle to draw liquid in vapor and/or droplet for into the flow. The liquid exit nozzle extends in front of the air outlet nozzle (see Fig. 2). Behan et al. also teach at least one of the nozzles of which is formed by a plug insert (46, 48) (see Fig. 2 and 4). The dispensing apparatus includes a baffle (50) (a reduced cross-section outlet nozzle) (see Fig. 4) located at or closely downstream of the air outlet nozzle. Behan et al. have all the features of the invention but Behan et al. do not specifically teaching the air outlet nozzle having a cross-section less than the cross-section of the liquid exit nozzle. It would have been obvious to one skilled artisan in the art at the time the invention was made to have the cross-section of the air outlet nozzle less than the cross-section of the liquid exit nozzle to create a higher suction force to draw out the liquid from the vessel.

Allowable Subject Matter

6. Claims 10-18 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fuhrig and Demarest et al. are cited of general interest.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thach H Bui whose telephone number is 571-272-4898. The examiner can normally be reached on Monday-Friday, 7:30-4 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on 571-272-4919. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T.B.
02/08/2005



David A. Scherbel
Supervisory Patent Examiner
Group 3700